

Français 1 of 1

<u>Images</u> <u>Description and Claims (69 Kb)</u>

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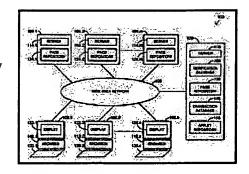
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- (54) A METHOD AND APPARATUS FOR FACILITATING BUSINESS TRANSACTIONS OVER A NETWORK BY PROVIDING A RELIABLE VERIFICATION SOURCE
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- (57) In conducting business transactions in the current electronic commerce environment, buyers may not be certain about seller's identity and reliability. Because of the inherent difficulty to ascertain sellers' identity and reliability over a computer network (such as the Internet), the buyers may never receive the goods or services ordered or only receive defective goods or substandard services. The



uncertainty about seller's identity and reliability severely hinders the transactions over

the Internet. To overcome this problem, a verification process is provided to facilitate the transactions between buyers and sellers. In receiving a request from a buyer to initiate a transaction over the Internet, a seller sends a verification identification to the buyer. The buyer then designates a verification node and sends the verification identification to the verification node over the Internet for the verification of the seller and a guarantee for the transaction. After receiving the verification and/or guarantee, the buyer then completes the transaction with the seller over the Internet.



Français

1 of 1

Description Claims

A METHOD AND APPARATUS FOR FACILITATING BUSINESS TRANSACTIONS OVER A NETWORK BY PROVIDING A RELIABLE VERIFICATION SOURCE FIELD OF THE INVENTION The present invention relates generally to the electronic commerce, and more specifically to facilitating business transactions between buyers and sellers over a computer network, such as the Internet.

BACKGROUND OF THE INVENTION With the rapid development of information technology and networking infrastructure, more and more business transactions are being conducted electronically over a computer network, such as the Internet. Using the Internet to conduct business transactions is so popular that it is now publicly known as electronic commerce. Specifically, a vendor (or seller) can set up a web site over the computer network (or the Internet) for storing the information about its goods (or services). The web site has a unique domain name and an IP (Internet Protocol) address, and stores the information about the goods (or services) in a set of web page files, such as HTML, SHTML, DHTML, or CGI files (Note: HTML stands for Hypertext Mark Language, SHTML for Secure HTML, DHTML for Dynamic HTML, and CGI for Common Gateway Interface). A web page file may contain one or more page links containing the path information to other web page files. Thus, using a web browser, a prospective or actual buyer can access to a home page file (the page file at the root level) of a web site. From the home page, the buyer can browse subsequent web page files by selecting links contained in the home page file. The subsequent web page files may further contain one or more page links, which can be further selected to browse web page files at ii next level. At any level, a browser can browse back to the previous web page file and re-select page links from the previous web page file.

Thus, using a browser, a buyer can navigate through web page files contained in a web site, search for information about goods (or services) of interest, select an item of the good" (or service), and place an order for the selected item (or service).

The current Internet technology readily enables vendors (or setters) set up web sites, which can be conveniently accessed by millions of buyers twenty four hours a day throughout the globe. Thus, it is fair and reliable to predict that the electronic commerce has a tremendous potential to promote transactions between vendors and buyers.

Unfortunately, in the current electronic commerce environment, it is very difficult for buyers to know the true identity and reliability of vendors. Due to the relatively low cost and readily available technical support, many vendors having relatively short business histories and less known business reputations can easily enter electronic commerce. Buyers can be located geographically far away from the vendors, thus increasing the difficulty for a buyer to know a local vendor. For example, a buyer may be located in San Francisco while a vendor may be located in Hong Kong. Further, for a less known vendor, its primary identification is he domain name assigned to its web site. However, the vendor's domain name, can be easily be deleted or changed.

As a result, many fraudulent transactions have occurred in the electronic commerce environment. Some buyers may never receive the goods or services ordered, or only receive defective goods or substandard services. Consequently, the uncertainty about vendors'identity and reliability becomes a barrier to conducting transactions in the electronic commerce environment.

There is, therefore, a need for an improved method and apparatus to facilitate transactions over a computer network between buyers and sellers.

There is also a need for a method and apparatus to verify sellers identity and reliability in the transactions over the computer network by providing a reliable verification node.

The present invention provides the methods and apparatus to meet t lese needs.

SUMMARY OF THE INVENTION Presently, in conducting transactions over the Internet, a buyer may lie not certain about a seller's identity and reliability. To address the shortcomings of the prior art, the present invention provides improved methods to facilitate transactions over the Internet between buyer nodes and seller nodes by providing a reliable verification node to verify and/or guarantee the transactions.

In one aspect, the present invention provides a method for conducting a transaction between a buyer node and a vendor node over a network. The method comprises the steps of: at the buyer node, designating a verification node; at the buyer node, sending a transaction request via the network to the vendor node, for initiating a transaction between the buyer node and the vendor node; at the vendor node, upon receiving the transaction request, sending a responding message via the network to the buyer node, the responding message including a vendor identification for the vendor node; at the buyer node, upon receiving the vendor identification, sending a verification request together with the vendor identification via the network to the verification node; at the verification node, upon receiving the vendor identification, sending a verification message via the network to the buyer node, to verify the vendor node; and at the buyer node, upon receiving the verification message, completing the transaction between the buyer node and the vendor node.

In another aspect, the present invention provides a method for conducting transactions over a network between a buyer node and a vendor node with a verification from a verification node. The method comprises the steps of at the vendor node: receiving from the buyer node a transaction request for initiating a transaction between the buyer node and the vendor node; upon receiving the transaction request, sending a responding message via the network to the buyer node, wherein the responding message contains a vendor identification for the vendor node, so that upon receiving the vendor identification from the buyer node the verification node can verify and/or guarantee the transaction for the vendor node; and upon completion of the verification by the verification node, completing the transaction initiated by the buyer node.

In still another aspect, the present invention provides a method for conducting transactions over a network between a buyer node and a vendor node with a verification from a verification node. The method comprises the step of at the buyer node: designating a verification node; sending a transaction request via the network to the vendor node, for initiating a transaction between the buyer node and the vendor node; receiving a responding message via the network from the vendor node, the responding message including a vendor identification for the vendor node; sending a verification request together with the vendor identification via the network to the verification node; receiving a verification message via the network from the verification node, to verify the vendor node and/or guaranty the

transaction; and upon receiving the verification message, completing the transaction between the buyer node and the vendor node.

The present invention also provides the apparatus for implementing, the corresponding methods as recited above.

BRIEF DESCRIPTION OF THE DRAWING The aforementioned advantages of the present invention as well as additional advantages thereof will be more clearly understood hereinafter as a result of a detailed description of a preferred embodiment of the invention when taken in conjunction with the following drawings in which: Figure 1 shows an exemplary network system 100, which can be used to perform the functions of the present invention; Figure 2 shows a graphical user interface 200, in accordance with the present invention; Figure 3 shows a graphical user interface 300, in accordance with the present invention; Figure 4 shows a graphical user interface 400, in accordance with the present invention; Figure 5 shows a graphical user interface 500, in accordance with the present invention; Figure 6 shows a graphical user interface 600, in accordance with the present invention; Figure 7 shows a flowchart illustrating the steps of conducting a transaction between a buyer node and a vendor node, in accordance with the present invention, and Figure 8 shows a block diagram illustrating an exemplary computer system, which can be used as a hardware platform to implement the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS The present invention comprises a novel method for facilitating transactions over a computer network, such as the Internet, between buyer r odes and vendor nodes by providing a reliable verification node.

Referring to figure 1, there is shown an exemplary network system 100, which is able to perform the functions of the present invention.

As shown in figure 1, the network system 100 includes a plurality of user computers (i. e. buyer nodes) 102.1,102.2,..., and 102. n; a plurality of vendor web sites (i. e. vendor nodes) 104.1,104.2,..., and 104. m; a verification center (i. e. verification node) 106; and a wide area network 108 (such as the Internet).

The user computers, vendor web sites, and verification center are all coupled to tie network 108.

Each of the vendor web sites (104.1,104.2,..., and 104. m) includes respective server (114.1,114.2,..., or 114. m) for processing service requests received; and a respective web page repository (124.1,124.2,..., or 124. m) for storing a plurality of page files, such as HTML, SHTML, DHTML, or CGI files.

A unique domain name and an IP (Internet Protocol) address are assigned to each of the vendor web sites. Each of the page files stored in a vendor web site contains the information about the goods (or services) provided by a vendor web site, and may further contain links to other page files that are stored either if the same vendor web site or in other web sites.

Each of the user computers (102.1,102.2,..., or 102. n) has a display screen (122.1,122.2,..., or 122. n) and a keyboard (132.1,132.2,..., or 132, n), and runs a respective browser (112.1,112. 2,..., or 112. n). A unique IP address is assigned to each of the user computers. Each of the browsers (112.1,112.2,..., and 112. n) is able to retrieve page files from any web

sites that are connected to the network 108-and display the retrieved page files in a web page format. Each of the user computers (102.1,102.2,..., or 102. n) contains a verification application for performing the functions of the present invention. When invoked, the verification application displays two windows 302 and 304, as will be discussed in connection with figure 3.

To retrieve a page file from a web site, a browser sends to the web site a service request; which includes a URL (Universal Resource Locator), the IP address assigned to the web site, and the IP address assigned to the user computer in which the browser is run. The URL contains the path information to the page file to be retrieved. Upon receiving the service request, the server for the web site locates the respective page file based on the URL, and sends the located page file to the browser based on the IP address assigned to the user computer on which the browser is run. Upon receiving the page file, the browser displays it on a computer screen, typically in a web page format.

If the retrieved page file contains a link to a page file at the next level, in response to selecting (i. e. clicking) the link, the browser sends a service request to the web site that stores the page file. Upon receiving the page file from the web site, the browser displays the page file in a web page format. Using links embedded in the retrieved page files, the browser can navigate from an upper level page file to a lower level page file. Also, in response to a selection of a "back"button (or an equivalent function control) on the browser graphical user interface, the browser is able to navigate from a lower level page file (the page file that is being currently displayed) back to the higher level page file (the page file previously displayed), so that a new link can be selected from the previously displayed page file. Thus, using the links on the page files, the browser can navigate through all the page files stored in one or more web sites connected to the network 108.

The verification center 106 includes a server 116 for processing service requests received, a verification database 126 for storing the information about vendor nodes to be verified, a page repository 136 for storing page files containing information to be provided to buyer nodes, and a transaction _ database 146 for storing the verified transactions. Specifically, for each of the vendor nodes (i. e. vendors) to be verified, the verification database 126 stores the information including: identification and security code assigned to the vendor, financial quality of the vendor, guarantee terms for the vendor, and specific goods (or services) to be verified for the vendor. To get the verification service from the verification center 106 (i. e. the guarantor), a vendor may be required to pay a fee and provide relevant information, such as its domain name, IP address, physical location, financial quality, credit history, and business license. Upon approval, the guarantor assigns an identification and a security code to the vendor. The information provided by the vendor is stored in the verification database 126.

Referring to figure 2, there is shown a graphical user interface 200 which can be displayed on any one of the buyer nodes 102.1,102,2,..., and 102. n shown in figure 1, in accordance with the present invention.

As shown in figure 2, the graphical user interface 200 includes a plurality of icons including a purchase icon 202. n. When a buyer clicks the purchase icon 202. n, a verification application is invoked to display a graphical user interface as shown in figure 3.

In describing the example shown in figure 2, it is assumed that the buyer clicks the purchase

icon 202. n on the user computer 102.1, on which a verification application has been installed. In response to the selection of the purchase icon 202. n, the verification application causes the browser 112.1 to display two browsing windows as shown in figure 3.

Referring to figure 3, there is shown a graphical user interface 300 which can be displayed on any one of the buyer nodes 102.1,102,2,..., and 102. n shown in figure 1, in accordance with the present invention.

In describing the example shown in figure 3, it is assumed that the graphical user interface 300 is displayed on the user computer 102.1. As shown in figure 3, the graphical user interface 300 includes a transaction window 302 and a verification window 304. The verification window 304 includes a verification icon 306 and a verification identification region 308.

Above the verification con 306, the name of a verification organization (ABC company in this example: is displayed. To initiate a transaction, the buyer sends a service request to a vendor node using the browser 112.1. Upon receiving the service request, the vendor node sends a page file to the user computer 102.1.

When the user computer 102.1 receives the page file from the vendor node, the verification application causes the browser 112.1 to display the page file in the transaction window 302 as shown in figure 4.

Referring to figure 4, there is shown a graphical user interface 400 which can be displayed on any of the buyer nodes 102.1,102,2,..., and 102. n shown in figure 1, in accordance with the present invention.

In describing figure 4, it is assumed that the graphical user interface 400 is displayed on the user computer 102.1. As shown in figure 4, the transaction window 302 includes a vendor information region 404 containing the information about a vendor node and an order form region 406 containing data entries for allowing a buyer to select goods (or services) and input payment methods. The vendor information region 404 includes an identification region 405 containing the verification identification provided by the vendor node. The order form region 406 includes an order icon 408. A buyer can submit an order by clicking the order icon 408.

To place an order, the buyer complets the data entries in the order form region 406. To verify a vendor node, the buyer first copies the verification identification from the identification region 405 to the verification region 308 and then clicks the verification icon 306. In response to the selection of the verification icon 306, the verification application causes the browser 112.2 to send a verification request, together with the verification identification, to the verification node 106 via the network 108. Upon receiving the verification request, the verification node 106 searches verification information in verification database 126 according to the verification identification, forms a verification page file containing the verification information, and sends the verification page file to the user computer 102.1 via the network 108. Upon receiving the verification page file, the verification application causes the browser 112.1 to display it in the verification window 304 as shown in figure 5.

It should be noted that the verification scheme shown in figure 4 is reliable, because the verification node is designated at the buyer node while the vendor node does not have any control over the designation of the verification node Referring to figure 5, there is shown a

graphical user interface 500 which can be displayed on any one of the buyer nodes 102.1,102,2,..., and 102. n shown in figure 1, in accordance with the present invention.

In describing figure 5, it is assumed that the graphical user interface 500 is displayed on the user computer 102.1 and a transaction is being conducted between the user computer 102.1 and the vendor node 104.1. As shown in figure 5, the verification window 304 includes a verification node region 502 for displaying the information about the verification node, a vender node region 504 for displaying the information about the vendor node, and a guarantee region 506 for displaying the guarantee information.

Upon receiving satisfactory verification information and guarantee terms from the verification node, the buyer can submit an order by clicking the order icon 408 shown in figure 5. In response, the verification application causes the browser 112.1 to send the order form 406 containing the order information to both the vendor node 104.1 and the verification node 106. Upon receiving the order form 406, the verification node 106 sends a confirmation receipt to the user computer 102.1. Upon receiving the confirmation receipt, the verification application causes the browser 112.1 to display the confirmation receipt in tile verification window 304 as shown in figure 6.

Referring to figure 6, there is shown a graphical user interface 600 which I can be displayed on any one of the buyer nodes 102.1,102.2,..., 102. n shown in figure 1, in accordance with the present invention.

In describing figure 6, it is assumed that the graphical user interface 600 is displayed on the user computer 102.1. As shown in figure 6, the verification window 304 displays a confirmation receipt 602 containing the confirmation information about the transaction completed between the buyer node and the vendor node. Specifically, the confirmation receipt 602 includes the name of the item (or service) ordered, the name of the vendor, the price of the order, the date of the transaction, and the guaranteed terms for the completed transaction.

Referring to figure 7, there is shown a flowchart illustrating the steps of conducting a transaction between a buyer node and a vendor node over the network system 100, in accordance with the present invention.

In describing the steps in figure 7, it is assumed that: (1) a buyer is using the user computer 102.1 to initiate a transaction, with the vendor node 104.1; (2) XYZ company is the owner of the vendor node 104.1; (3) ABC company is the owner of the verification node 106; (4) the graphical user interface 200 as shown in figure 2 is displayed on the user computer 102.1; and (5) a verification application for performing the functions of the present invention is installe on the user computer 102.1.

As shown in figure 7, at step 704, the buyer initiates the transaction by clicking the purchase icon 202. n displayed on the graphical user interface 200.

At step 706, in response to the selection of the purchase icon 202. n, the verification application causes the browser 112.1 to display the graphical user interface 300 as shown in figure 3 on the user computer 102.1. The graphical user interface 300 includes a transaction window 302 and a verification window 304.

At step 708, using the browser 112.1, the buyer enters the URL for the vendor node 104.1 and sends a service request, together with the URL, to the vendor node 104.1 via the network 108.

At step 710, upon receiving the service request, the vendor node 104.1 retrieves a transaction page file and sends it to the user computer 102.1. Tie transaction page file contains a verification identification assigned to the vendor node 104.1.

At step 712, upon receiving the transaction page file, the verification application causes the browser 112.1 to display the transaction page file in the transaction window 302 as shown in figure 4. The transaction window 302 includes a vendor information region 404 and a transaction region 406. The vendor information region 404 contains an identification region 405 for displaying the verification identification provided by the vendor node 104.1. The transaction region 406 includes an order form 406, which further includes an order icon 408.

At step 714, to place an order, the buyer first completes the data entries in the order form 406. To verify the vendor node 104.1, the buyer copies the verification identification from the identification region 405 to the identification region 308. The buyer then clicks the verification icon 306 shown in figure 4. In response to the selection of the verification icon 306, the verification application causes the browser 112.1 to send a verification request, together with the verification identification contained in the verification region 405, to a verification node designated at the user computer 102.1. In this example, the designated verification node is the node 106. Typically, the owner of a verification node is a well recognized organization that has financial resource and business expertise to analyze vendors financial quality and business reliability.

It should be noted that the verification scheme described at step 714 is reliable, because the verification node is designated at the buyer node while, the vendor node does not have any control over the designation of the verification node.

At step 716, upon receiving the verification request and the verification identification, the verification node 106 searches the verification information from the verification database 126 for the vendor node identified by the verification identification, and examines the transaction contained in the order form 406.

At step 718, the verification node forms a verification page file containing the verification information, stores the verification page file into the transaction database 146 as a record, and sends the verification page file to the user computer 102.1.

At step 720, upon receiving the verification page file, the verification application causes the browser 112.1 to display the verification page file in he vendor node information region 504 as shown in figure 5.

If the verification node 106, at step 716, determines that the vendor node 104.1 has not subscribed to its verification service, the vendor node information region 504 displays a message to the effect that it cannot verify the vendor node and cannot guarantee this transaction. If the verification node 106, at step 716, determines that the vendor node 104.1 has subscribed to its verification service, the vendor node information region 504 displays the guaranty terms for the transaction. The guaranty terms may specify that the guarantor will reimburse the payment to this transaction, if the buyer informs the guarantor, under certain

conditions within a period of time, that the buyer is not satisfied with the transaction.

At step 722, if satisfied with the verification information and the guaranty terms, using the user computer 102.1, the buyer sends the completed order form 406 shown in figure 5 to both vendor node 104.1 and the verification node 106 by clicking order icon 408 as shown in figure 5. Upon receiving the completed order form 406, the vendor node 104.1 forwards the completed order form 406 to the verification node 106.

At step 724, upon receiving the completed order form 406 from the user computer 102.1 and the vendor node 104.1, the verification node forms a confirmation receipt and sends it to the user computer 102.1 and the vendor, node 104.1.

At step 726, the buyer and vendor node 104.1 can store and/or print out the conformation receipt as a record.

Referring to figure 8, there is shown a block diagram illustrating an exemplary computer system 800, which can be used as a hardware platform for a user computer (102.1,102.2,..., or 102. n), a vendor web site (104.1, 104.2,..., or 104. m), or the verification center 106.

As shown in figure 8, the computer system 800 includes a system bus 801, a processing unit 802, a memory device 804, a disk drive interface 806, a hard disk 808, a display interface 810, a display monitor 812, a serial bus interface 814, a mouse 816, a keyboard 818, and a network communication interface 820.

The hard disk 808 is coupled to the disk drive interface 806; the monitor display 812 is coupled to the display interface 81 0; and the mouse 816 and keyboard 818 are coupled to the serial bus interface 814. Coupled to the system bus 801 are the processing unit 802, the memory device 804, the disk drive interface 806, the display interface 810, and the network communication interface 820.

Memory device 804 stores data and programs. Operating together with the disk drive interface 806, the hard disk 808 also stores data and programs.

However, memory device 804 has faster access speed than hard disk 808, while the hard disk 808 has higher capacity than memory device 804.

Operating together with the display interface 810, the display monitor 812 provides visual interfaces between the programs being executed and users, and displays the outputs generated by the programs.

Operating together with the serial bus interface 814, the mouse 816 and keyboard 818 provide inputs to the computer system 800.

The network communication interface 820 provides an interface between the computer system 800 and the network 108 in accordance with predetermined networking protocols.

The processing unit 802, which may include more than one processor, controls the operations of the computer system 800 by executing the programs stored in the memory device 804 and hard disk 808. The processing unit also controls the transmissions of data and programs between the memory device 804 and the hard disk 808.

In the present invention, the steps shown in figure 7 are jointly performed by the user computer 102.1, the vendor node 104.1, and the verification node 106. Thus, the programs for performing the steps shown in figure 7 can be distributively stored in and executed by three computer systems shown in figure 8. Specifically, the programs for performing the steps shown in figure 7 can be distributively stored in the memory devices 804 or hard disks 808 of the three computer systems, and distributively executed by the processing units 802 of the three computer systems.

It should be noted that the embodiments have been described under an assumption that the transaction is conducted between the user computer 102.1 and the vendor web site 104.1 and verified by the verification center 106.

However, the principe described above may apply to any user computers, vendor web sites, and verification centers that are connected to the network 108.

While the invention has been illustrated and described in detail in the drawing and foregoing description, it should be understood that the invention may be implemented through alternative embodiments within the spirit of the present invention. Thus, the scope of the invention is not intended to be limited to the illustration and description in this specification, but is to be defined by the appended claims.

Description Claims

CLAIMS What is claimed is: 1. A method for conducting a transaction between a buyer node and a vendor node over a network, comprising the steps of: (a) at the buyer node, designating a verification node; (b) at the buyer node, sending a transaction request via the network o the vendor node, for initiating a transaction between the buyer node and the vendor node; (c) at the vendor node, upon receiving the transaction request, sending a responding message via the network to the buyer node, the responding message including a vendor identification for the vendor node; (d) at the buyer node, upon receiving the vendor identification, sending a verification request together with the vendor identification via the network to the verification node; (e) at the verification node, upon receiving the vendor identification, sending a verification message via the network to the buyer node, to verify the vendor node; and (f) at the buyer node, upon receiving the verification message, completing the transaction between the buyer node and the vendor node.

- 2. The method of claim 1, further comprising the step of: (g) sending a completion message to the verification node, the completion message including information for indicating completion of the transaction between the buyer node and the vendor node.
- 3. The method of claim 2, further comprising the step of: (h) at the verification node, sending a confirmation message to the buyer node, the confirmation message containing the information for confirming the completion of the transaction between the buyer node and the vendor node.
- 4. The method of claim 1, wherein the verification message includes steps of: guaranteeing the transaction, and reimbursing a payment made to the transaction, if the vendor node does not provide a satisfactory transaction.
- 5. A method for conducting transactions over a network between a buyer node and a vendor

node with a verification from a verification node, comprising thin steps of at the vendor node: (a) receiving from the buyer node a transaction request for initiating a transaction between the buyer node and the vendor node; (b) upon receiving the transaction request, sending a responding message via the network to the buyer node, wherein the responding message contain 3 a vendor identification for the vendor node, so that upon receiving the vendor identification from the buyer node the verification node can verify and/or guarantee the transaction for the vendor node; and (c) upon completion of the verification by the verification node, completing the transaction initiated by the buyer node.

- 6. The method of claim 5, further comprising the step of at the vendor node: sending a completion message to the verification node, the completion message including information for indicating completion of the transaction between the buyer node and the vendor node.
- 7. The method of claim 6, further comprising the step of at the vendor node: receiving from the verification node a confirmation message for confirming the completion of the transaction between the buyer node and the vendor node; and recording the confirming message.
- 8. A method for conducting transactions over a network between a buyer node and a vendor node with a verification from a verification node, comprising the steps of at the buyer node: (a) designating a verification node; (b) sending a transaction request via the network to the vendor node, for initiating a transaction between the buyer node and the vendor node; (c) receiving a responding message via the network from the vendor node, the responding message including a vendor identification for the vendor node; (d) sending a verification request together with the vendor identification via the network to the verification node; (e) receiving a verification message via the network from the verification node, to verify the vendor node and/or guaranty the transaction; and (f) upon receiving the verification message, completing the transaction between the buyer node and the vendor node.
- 9. The method of claim 8, further comprising the step of at the buyer node: (g) sending a completion message to the verification node, the completion message including information for indicating completion of the transaction between the buyer node and the vendor node.
- 10. The method of claim 9, further comprising the step of at the buyer node: (h) receiving a confirmation message from the verification node, the confirmation message containing the information for confirming the completion of the transaction between the buyer node and the vendor node.
- 11. A system for conducting a transaction between a buyer node and a vendor node over a network, comprising: (a) means, located at the buyer node, for designating a verification node; (b) means, located at the buyer node, for sending a transaction request via the network to the vendor node, for initiating a transaction between the buyer node and the vendor node; (c) means, located at the vendor node, upon receiving the transaction request, for sending a responding message via the network to the buyer node, the responding message including a vendor identification for the vendor node; (d) means, located at the buyer node, upon receiving the vendor identification, for sending a verification request together with the vendor identification via the network to the verification node; (e) means, located at the verification node, upon receiving the vendor identification, for sending a verification message via the network to the buyer node, to verify the vendor node; and (f) means, located at the buyer node, upon receiving the verification message, for completing the transaction

between the buyer node and the vendor node.

- 12. The system of claim 11, further comprising: (g) means for sending a completion message to the verification node the completion message including information for indicating completion of the transaction between the buyer node and the vendor node.
- 13. The system of claim 12, further comprising: (h) means, located at the verification node, for sending a confirmation message to the buyer node, the confirmation message containing the information for confirming the completion of the transaction between the buyer node and the vendor node.
- 14. The system of claim 11, further comprising: means for sending information indicating guaranteeing the transaction; and means for sending information indicating reimbursing a payment made to the transaction, if the vendor node does not provide a satisfactory transaction.
- 15. An apparatus for conducting transactions over a network between a buyer node and a vendor node with a verification from a verification node, the vendor node comprising: (a) means for receiving from the buyer node a transaction request for initiating a transaction between the buyer node and the vendor node; (b) means, upon receiving the transaction request, for sending a responding message via the network to the buyer node, wherein the responding message contains a vendor identification for the vendor node, so that upon receiving the vendor identification from the buyer node the verification node can verify and/or guarantee the transaction for the vendor node; and (c) means, upon completion of the verification by the verification node, for completing the transaction initiated by the buyer node.
- 16. The apparatus of claim 15, the vendor node further comprising: means for sending a completion message to the verification node, the completion message including information for indicating completion of the transaction between the buyer node and the vendor node.
- 17. The apparatus of claim 16, the vendor node further comprising: means for receiving from the verification node a confirmation message for confirming the completion of the transaction between the buyer node and the vendor node; and means for recording the confirming message.
- 18. An apparatus for conducting transactions over a network between a buyer node and a vendor node with a verification from a verification node, the buyer node comprising: (a) means for designating a verification node; (b) means for sending a transaction request via the network to the vendor node, for initiating a transaction between the buyer node and the vendor node; (c) means for receiving a responding message via the network from the vendor node, the responding message including a vendor identification for the vendor node; (d) means for sending a verification request together with the vendor identification via the network to the verification node; (e) means for receiving a verification message via the network from the verification node, to verify the vendor node and/or guaranty the transaction; and (f) means, upon receiving the verification message, for completing the transaction between the buyer node and the vendor node.
- 19. The apparatus of claim 18, the buyer node further comprising: (g) means for sending a completion message to the verification node the completion message including information

for indicating completion of the transaction between the buyer node and the vendor node.

20. The apparatus of claim 19, the buyer node further comprising: (h) means for receiving a confirmation message from the verification node, the confirmation message containing the information for confirming the completion of the transaction between the buyer node and the vendor node.

Description Claims